UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

513

7590

07/29/2009

WENDEROTH, LIND & PONACK, L.L.P. 1030 15th Street, N.W., Suite 400 East Washington, DC 20005-1503 EXAMINER

YOUNG, MICAH PAUL

ART UNIT PAPER NUMBER

1618

DATE MAILED: 07/29/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/048,063	01/28/2002	Norihito Shimono	2002-0055A	8747

TITLE OF INVENTION: SOLID PREPARTION CONTAINING CHITOSAN POWDER AND PROCESS FOR PRODUCING THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	10/29/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where m

appropriate. All further indicated unless correct maintenance fee notification	correspondence including the delow or directed other actions.	ng the Patent, advance on nerwise in Block 1, by (a	rders and notification of n a) specifying a new corres	naintenance fees v pondence address	vill be ; and/o	mailed to the current (b) indicating a sepa	correspondence address a arate "FEE ADDRESS" fo	
	DENCE ADDRESS (Note: Use Bl	Fee(	s) Transmittal. Thers. Each additiona	is certil Il paper	icate cannot be used f	or domestic mailings of the for any other accompanying ont or formal drawing, mus		
513	7590 07/29	/2009	nave				mission	
1030 15th Stree Suite 400 East		CK, L.L.P.	I he State addr trans	reby certify that thes Postal Service weeksed to the Mail smitted to the USP	iis Fee( vith suf Stop TO (57	e of Mailing or Trans s) Transmittal is being ficient postage for firs ISSUE FEE address 1) 273-2885, on the d	mission g deposited with the Unites st class mail in an envelop above, or being facsimil- late indicated below.	
Washington, DC	20005-1503						(Depositor's name)	
							(Signature)	
							(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.	
10/048,063	01/28/2002	•	Norihito Shimono			2002-0055A	8747	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1510	\$0	\$0		\$1510	10/29/2009	
EXAM	MINER	ART UNIT	CLASS-SUBCLASS	]				
	ICAH PAUL	1618	424-468000	l				
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).			2. For printing on the p (1) the names of up to	2. For printing on the patent front page, list  (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,				
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.					
PLEASE NOTE: Un	less an assignee is ident th in 37 CFR 3.11. Comp	ified below, no assignee	THE PATENT (print or type data will appear on the part a substitute for filing and (B) RESIDENCE: (CITY	atent. If an assign assignment.			ocument has been filed fo	
Please check the appropr	riate assignee category or	categories (will not be pr	rinted on the patent):	Individual 🖵 Co	orporati	on or other private gro	oup entity 🗖 Governmen	
4a. The following fee(s) are submitted:  ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			o. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038	is atta	iched. required fee(s), any de		
a. Applicant claim	ntus (from status indicated as SMALL ENTITY statu	is. See 37 CFR 1.27.	☐ b. Applicant is no long	-				
NOTE: The Issue Fee ar interest as shown by the	nd Publication Fee (if reqrecords of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than t Office.	he applicant; a regi	istered	attorney or agent; or th	ne assignee or other party in	
Authorized Signature				Date				
Typed or printed name				_				
This collection of inform an application. Confider submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 22	ntiality is governed by 35 dapplication form to the ions for reducing this bu. Virginia 22313-1450. DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to th NOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est depending upon the indive e Chief Information Office COMPLETED FORMS TO	etain a benefit by t imated to take 12 idual case. Any co er, U.S. Patent and D THIS ADDRESS	he pub minutes omment Traden S. SEN	lic which is to file (and to complete, including to on the amount of the nark Office, U.S. Dep D TO: Commissioner	d by the USPTO to process ng gathering, preparing, and me you require to complete artment of Commerce, P.O for Patents, P.O. Box 1450	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FILING DATE FIRST NAMED INVENTOR		CONFIRMATION NO.		
10/048,063 01/28/2002		Norihito Shimono	2002-0055A	8747		
513 75	513 7590 07/29/2009			EXAMINER		
WENDEROTH,	LIND & PONACK,	YOUNG, MI	CAH PAUL			
1030 15th Street, N	I.W.,	ART UNIT	PAPER NUMBER			
Suite 400 East Washington, DC 2	0005-1503	1618 DATE MAILED: 07/29/200	9			

## **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)					
	10/048,063	SHIMONO ET AL.					
Notice of Allowability	Examiner	Art Unit					
	MICAH-PAUL YOUNG	1618					
The MAILING DATE of this communication appearable All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commu <b>GHTS.</b> This application is s	this application. If not included inication will be mailed in due course. <b>THIS</b>					
1. This communication is responsive to <u>Pre-Appeal Brief date</u>	<u>ed 3/31/09</u> .						
2. X The allowed claim(s) is/are 29,30,33,34,37,38.							
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority ur</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> <li>3.  Copies of the certified copies of the priority documents have</li> </ul>	been received. been received in Application	n No					
International Bureau (PCT Rule 17.2(a)).							
* Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.							
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give							
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.						
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Reviev	v ( PTO-948) attached					
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date							
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date							
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).							
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.							
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6.	formal Patent Application ummary (PTO-413), Mail Date					
3. ☐ Information Disclosure Statements (PTO/SB/08), 7. ☐ Examiner's Amendment/Comment Paper No./Mail Date							
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. ⊠ Examiner's 9. □ Other	Statement of Reasons for Allowance					
/MICAH-PAUL YOUNG/	/Michael G. Ha						
Examiner, Art Unit 1618		tent Examiner, Art Unit 1618					

Application/Control Number: 10/048,063 Page 2

Art Unit: 1618

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: The claims are drawn to a sustained release formulation consisting of a solid material and a water-insoluble coating film. The film consists essentially of chitosan powder having a particle size from 0.5-400 microns, dispersed in a water insoluble polymer such as ethylcellulose and water-insoluble enteric polymers. The weight ratio of the water-insoluble polymer to the chitosan is from 4:1 to 1:4. The Lerner patent discloses a solid dosage form comprising a coating of a water-insoluble polymer and a water-soluble powder dispersed in the citing. The Lerner patent discloses chitosan and exemplifies calcium pectin as the pore forming powders dispersed in waterinsoluble polymers similar to the instant claims. The Declaration dated 7/7/08 provides unexpected results, showing that chitosan containing coatings provide superior sustained release profiles than calcium pectin containing coatings. Since the Lerner patent lists chitosan and calcium pectin as functional equivalents it would have been expected for the compounds to produce similar release profiles. However the Declaration shows that even at comparable ratios (1:1) calcium pectin provides an inferior sustained release profile. For these reasons the claims are novel and unobvious over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICAH-PAUL YOUNG whose telephone number is (571)272-

Application/Control Number: 10/048,063 Page 3

Art Unit: 1618

0608. The examiner can normally be reached on Monday-Friday 7:00-4:30; every other Monday

off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael G. Hartley can be reached on 571-272-0616. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael G. Hartley/

Supervisory Patent Examiner, Art Unit 1618

/MICAH-PAUL YOUNG/

Examiner, Art Unit 1618